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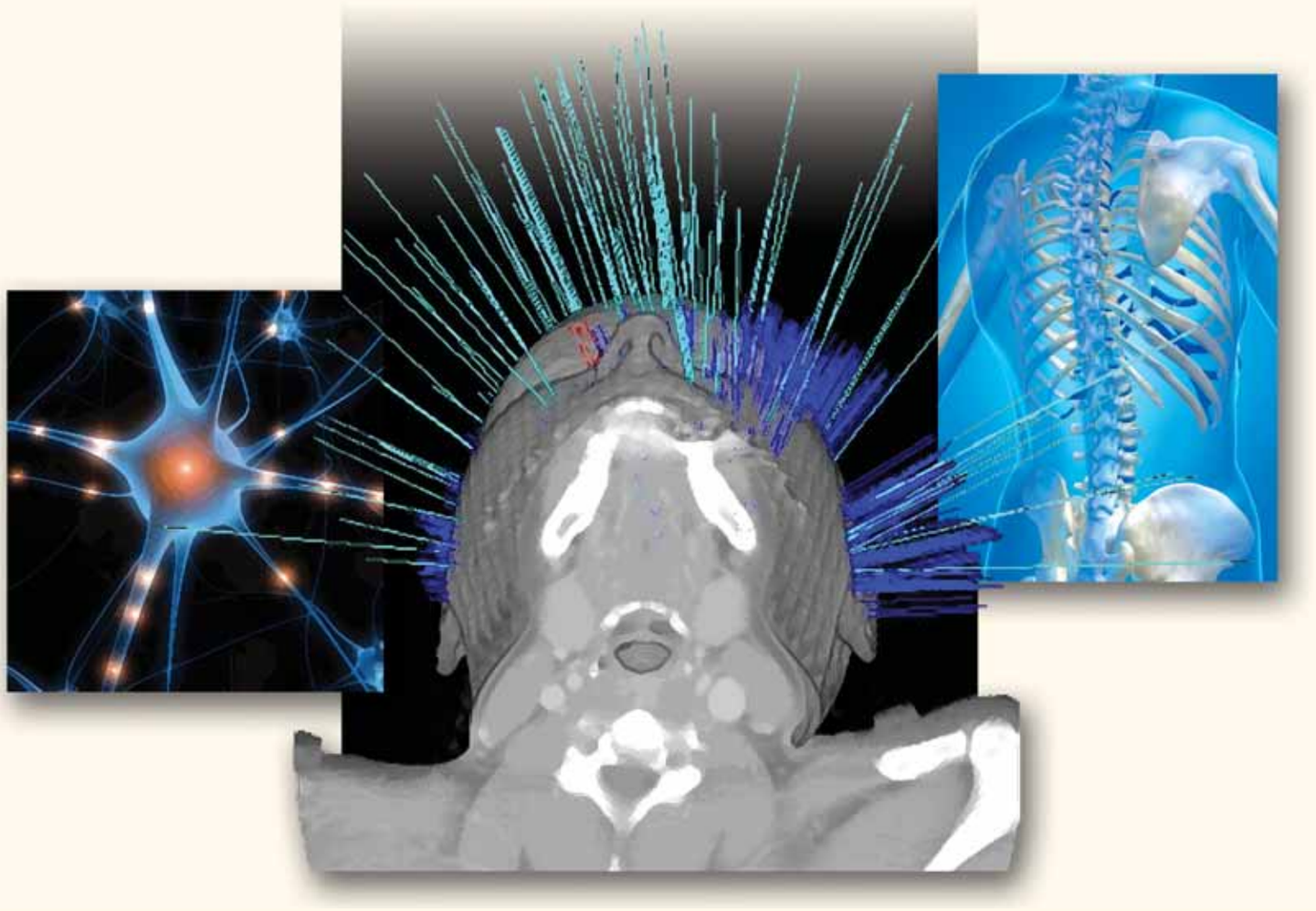
WINTHROP University Hospital

Progressive Neuroscience

A publication for physicians produced by the Institute for Neurosciences at Winthrop-University Hospital



- Interdisciplinary Revision Spine Surgery
- New Movement Disorders Program
- PFO Closure Helps Reduce Strokes

Message from the Chiefs

Michael H. Brisman, MD

Malcolm H. Gottesman, MD

While Webster defines "teamwork" as the cooperative effort by members of a group to achieve a common goal, at Winthrop-University Hospital's comprehensive Institute for Neurosciences, teamwork is much more than simply working together. It is the key to our efficiency, and allows us to achieve superior patient outcomes.

However, teamwork success is not automatic. It requires harnessing the power of multidisciplinary collaboration. This issue of *Progressive Neuroscience* features outstanding examples of how some of our specialists — including neurologists, neurosurgeons, orthopaedists, neuro-oncologists and neurointensivists — create strong synergies, linking and channeling their strengths so that the collective whole is greater than the sum of their individual knowledge, talent and skill.

For example, the article about revision spine surgery highlights the expert collaboration of neurosurgeons and orthopaedists, while the overview of our Movement Disorders Program focuses on cooperation between neurologists and neurosurgeons. The piece about our Neuro-oncology Program outlines the cooperation between specialists in the Hospital's Institute for Neurosciences and the Institute for Cancer Care, and the article about PFO closure underscores the joint efforts of interventional cardiologists and neuroscience specialists.

Reflecting the breadth and depth of our advanced programs and services, this second issue of *Progressive Neuroscience* also illustrates the teamwork involved in the modern treatment of brain AVMs offered at Winthrop, as well as a look at the rigorous care provided by the Hospital's team of neurointensivists.

Winthrop's Institute for Neurosciences team builds on its specialists' core competencies. They bring different frames of reference to problems that spark dynamic cross-pollination of ideas, which ultimately result in innovative techniques for treating the full range of diseases and disorders of the nervous system. This strategy, coupled with their use of cutting-edge technology, can only benefit the patients you refer to us.

Once again, it is our privilege to treat your patients; we value our ongoing partnership in their care.

Michael H. Brisman, MD
Chief, Division of Neurosurgery
Co-Director, Institute for Neurosciences

Malcolm H. Gottesman, MD
Chief, Division of Neurology
Co-Director, Institute for Neurosciences

PS: Thank you for your positive response to the premier issue of Progressive Neuroscience. *We hope you find this issue as worthwhile.*

Mohammad Ibrahim, MD
Neurointensivist
516.663.4525

Dr. Ibrahim is a neurointensivist with a special interest in neurosonology (sonographic imaging of the brain, intracranial vessels, spine and nerves). His post-graduate training includes a Fellowship in Vascular Neurology at the University of Medicine and Dentistry of New Jersey. He completed a neurology residency at SUNY Downstate in Brooklyn and training in internal medicine at the Flushing Hospital Medical Center. He also completed a residency in internal medicine and received his medical degree at Dow Medical College and Civil Hospital in Karachi, Pakistan.

Srihari S. Naidu, MD
Director, Cardiac Catheterization Laboratory
Director, Hypertrophic Cardiomyopathy Center
516.663.9696

Dr. Naidu is skilled in all aspects of interventional cardiology, including atrial septal defect and patent foramen ovale closure, alcohol septal ablation for hypertrophic cardiomyopathy, aortic and mitral valvuloplasty, and peripheral and coronary intervention. He is Board Certified in Internal Medicine, Cardiovascular Disease and Interventional Cardiology. His post-graduate training includes Fellowships in Interventional Cardiology and General Cardiology at the University of Pennsylvania Medical Center, as well as a residency in internal medicine at New York Hospital-Cornell Medical Center. He received his medical degree from Brown University. Dr. Naidu has published numerous articles and editorials dealing with angioplasty outcomes, new technology and innovative procedural modifications; he regularly presents his research throughout the United States and Europe.

Richard Obedian, MD
Orthopaedic Surgeon
516.933.4350

Dr. Obedian specializes in surgery of the spine and practices general orthopaedics. He is a Diplomate of the American Board of Orthopaedic Surgery, with additional certification in X-Stop®, artificial disc replacement and kyphoplasty. His post-graduate training includes a Fellowship in Spinal Surgery at the Hospital for Special Surgery. He completed a residency in orthopaedic surgery at the Hospital for Joint Diseases and a surgical internship at New York University Medical Center. Dr. Obedian earned his medical degree at the Columbia University College of Physicians and Surgeons. He presents nationally on a variety of orthopaedic issues, including back pain, kyphoplasty and osteoarthritis. He has also published many articles in national medical journals.

Brian J. Snyder, MD
Neurosurgeon
516.225.9031

Dr. Snyder specializes in the surgical treatment of movement disorders such as Parkinson's disease, tremor and dystonia, seizure disorders and epilepsy, as well as the surgical management of pain. He is an expert in deep brain stimulation (DBS), utilizing microelectrode recording; procedures for mapping, recording and identifying seizure foci in the brain; the surgical resection of these foci; vagal nerve stimulation (VNS); motor cortex stimulation (MCS); and spinal cord stimulation (SCS). His post-graduate training includes a Fellowship in Stereotactic and Functional Neurosurgery under Dr. Andres Lozano at the Toronto Western Hospital, University of Toronto. He completed a neurological surgery residency and general surgery internship at the Mount Sinai School of Medicine, where he was Chief Neurosurgical Resident. Dr. Snyder received his medical degree from the Temple University School of Medicine. He has published and presented extensively on functional neurosurgery, including works on deep brain stimulation for Parkinson's disease, primary dystonia and depression, as well as stereotactic radiosurgery for tremor and seizure outcomes associated with cavernous malformations.

William J. Sonstein, MD
Neurosurgeon
516.255.9031

Dr. Sonstein, a Board-Certified Diplomate of the American Board of Neurosurgery, has a special interest in complex spine surgery. He is one of Long Island's most experienced practitioners of Posterior Lumbar Interbody Fusion (PLIF), which relieves intractable back pain. When indicated, he uses minimally invasive procedures, such as kyphoplasty and X-Stop®, to treat spinal compression fractures and spinal stenosis. His post-graduate training includes a Fellowship in Spine Surgery at Tampa General Hospital, as well as a neurosurgical residency at Montefiore Medical Center, where he was Chief Resident. He earned his medical degree from Temple University School of Medicine. Dr. Sonstein has participated extensively in neurosurgery research and clinical trials, and has authored and co-authored journal articles, scientific abstracts and book chapters.

Lee E. Tessler, MD
Chairman, Neurosurgery Quality Improvement Committee
516.255.9031

Dr. Tessler specializes in the multimodality treatment of malignant and benign brain tumors, which includes stereotactic surgery and radiosurgery. He is proficient in CyberKnife® Radiosurgery. His post-graduate training includes a residency in neurosurgery and internship in general surgery at New York University Medical Center and Bellevue Hospital Center, where he was Chief Resident. He earned his medical degree at The Ohio State University College of Medicine and Public Health in Columbus, Ohio, with clinical honors in neurosurgery and general surgery.

Elzbieta Wirkowski, MD
Director, Cerebrovascular Disorders & Stroke Program
Co-Director, Neuroscience Intensive Care Unit
516.663.4525

Dr. Wirkowski specializes in cerebrovascular neurology and neurocritical care. She is Board Certified in Neurology, Vascular Neurology and Neurocritical Care. Her post-graduate training includes an internship and residency in neurology, as well as a Cerebrovascular Fellowship at Long Island Jewish Medical Center, where she participated in multiple research trials dealing with neurocritical and cerebrovascular problems. Dr. Wirkowski earned her medical degree with honors from Warsaw University in Poland, where she also studied molecular biology. She is the author of many publications dealing with neurocritical care and stroke, and presents regularly at national and international meetings.

Winthrop-University Hospital's Institute for Neurosciences

Winthrop-University Hospital is a 591-bed teaching hospital located on Long Island in Mineola, NY. A major regional healthcare resource, the Hospital has been a leading healthcare provider for more than a century, dedicated to the integrity, dignity and well-being of every individual. Winthrop offers a full complement of advanced inpatient and outpatient services with a deep commitment to medical education and research.

Physicians and surgeons in **Winthrop's Institute for Neurosciences** are pioneering the use of technologically advanced approaches for the diagnosis and treatment of diseases of the brain and spine, including computerized imaging systems, state-of-the-science surgical interventions and the latest generation of medication therapies.

The Institute's interdisciplinary team includes neurologists; neurosurgeons; neuro-intensivists; pediatric neurologists and neurosurgeons; neuroradiologists; vascular surgeons; orthopaedic spine surgeons; neuro-oncologists; neuropathologists; neurophysiologists; and specially trained nurse practitioners, physician assistants and nurses. Specialized physical and occupational therapy, social work and other supportive services are key components of the Institute. These experts are up to date on the latest developments in neuroscience and help pave the way for new discoveries through participation in clinical research trials, which enables them to provide patients with access to tomorrow's more promising therapies.

Programs & Services Offered by the Institute for Neurosciences

Neuroscience Intensive Care Unit

A 14-acute-care-bed unit reserved for patients with serious, complex neurological issues. The focus is on providing continuous monitoring and instantaneous results of critical values, allowing the expert staff, experienced in using advanced technology and providing neurocritical care, to employ aggressive interventions that treat neurological deterioration.

Neurology

- Epilepsy Program
- Headache Program
- Movement Disorders Program
- Multiple Sclerosis Treatment Center
- Neuromuscular/Peripheral Neuropathy Program
- NYS Designated Stroke Center with AHA and ASA "Gold" level status

Neurosurgery

- 3D Spinal Navigation
- Aneurysm Coiling & Clipping
- Disc Replacement
- Brain Aneurysm Program
- Brain Tumor Program
- Brain & Skull Base Surgery
- Carotid Stenting & Endarterectomy
- Cerebrovascular & Endovascular Surgery
- Complex & Minimally Invasive Spinal Surgeries
- Complex Cranial Surgery
- Computer-Assisted Resection of Brain Tumors
- CyberKnife® Radiosurgery
- Endoscopic Pituitary Surgery
- Epilepsy Surgery Program
- Facial Pain/Trigeminal Neuralgia Program
- Image-Guided Spine Surgery
- Kyphoplasty
- Microdiscectomy
- Microneurosurgical Techniques
- Microvascular Decompression for Trigeminal Neuralgia
- Neuro-oncology
- Neuropathology
- Parkinson's Surgery Program
- Pediatric Neurosurgery
- Posterior Lumbar Interbody Fusion
- Prestige® Cervical Disc
- Programmable Shunt Placement
- Spinal Stimulation
- Stereotactic Radiosurgery
- Traumatic Brain & Spine Injury Diagnosis & Treatment
- X-Stop® for Spinal Stenosis

Neuroradiology

- Aneurysm Treatment
- CT Perfusion Scanning
- Interventional Neuroradiology
- Neuroangiography
- Neuro Diagnostic Lab
- Positron Emission Tomography (PET) Scanning
- Ultrafast Computed Tomography (CT) & Magnetic Resonance Imaging (MRI)

Pediatric Neurology

- Attention Disorders & Learning Disabilities Treatment
- Brain Tumor Treatment
- Evaluation & Treatment of Children with Headaches
- Evaluation & Treatment of Neurological Disorders
- Neuro Developmental Screening & Early Intervention
- Pediatric Intensive Care Unit
- Seizure Disorders Management
- Treatment for Hydrocephalus & Other CNS Anomalies

For more information, call the Institute for Neurosciences at 1-866-NEURORX.

WINTHROP University Hospital
Care without compromise.

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